

## ABSTRACT

### DRUG UTILIZATION STUDY OF $\beta_2$ -AGONIST DRUG IN ASTHMA PATIENT (Study at Dr. Soetomo Hospital Surabaya)

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**Background.** Asthma is a heterogenous disease and usually characterized by chronic airway inflammation. Another study declare that prevalence of asthma in Indonesia were increased. There are many benefit from use  $\beta_2$ -agonist drug for asthma treatment because it has bronchodilator and bronchoprotector activity.

**Objectives.** The aim of this study are to identify the utilization of  $\beta_2$ -agonist drug in asthma and Drug Related Problems (DRPs) that occur in using  $\beta_2$ -agonist drug.

**Methods.** This study has retrospective observasional method by using patient's *Electronic Medical Record* (EMR) who are in January-December 2015 period. All data were analyzed by compared with Global Initiative for Asthma 2015 (GINA 2015).

**Results.** In this study, there are 34 subjects that appropriate with inclusion criteria. There are 44.11% subject use SABA, 8.84% use LABA, 47.05% use combination SABA and LABA.  $\beta_2$ -agonist drug that mostly used is Salbutamol (SABA) and Formoterol (LABA).  $\beta_2$ -agonist drug + corticosteroid is combination therapy that mostly used in this study. There were some administration dose that given by physician according to patient's condition. Problems that potentially occur in this study are adverse effect and interaction between  $\beta_2$ -agonist with corticosteroid 60.49% and with others simpatomimetics agent 39.51%.

**Conclusion.** Drug of choice for asthma treatment are Salbutamol as reliever therapy and Formoterol as controller therapy. Administration dose that given were appropriate with GINA 2015. None of actual DRPs occurred.

**Keywords.** Drug utilization study, Asthma,  $\beta_2$ -agonist drug, Descriptive analysis